

generating bending wave vibration from a contact, measuring the bending wave vibration, and processing the measured bending wave signal to calculate information relating to the contact including applying a correction to convert the measured bending wave signal to a propagation signal as if from a non-dispersive wave source.

The newly cited Kinra reference, which is in a different field, adds nothing to cure the deficiencies of Knowles. Kinra involves ultrasonic non-destructive testing of thin materials, and describes sending an ultrasonic signal through a thin sheet of material to measure properties of the material. There are distinct differences between Kinra and the invention.

First, Kinra does not describe contacting the thin material at a discrete location. Rather, the source of the ultrasonic signal is displaced from the specimen and is propagated to the specimen through an intermediate medium, such as water.

Second, Kinra describes propagating an ultrasonic signal through the thickness of the material and back again to measure specimen properties. There is nothing in Kinra that suggests how such a technique might be used to calculate information relating to a discrete contact, even if a discrete contact between the signal generating device and the specimen were made.

Third, the specific problem addressed by Kinra is one of evaluating a specimen having a thickness that is relatively small compared to the wavelength of the ultrasonic signal used. A problem arises when evaluating such specimens because reflected signals are received at the same time the signal pulse is still being sent. In one sense, this is the exact opposite of the problem encountered in the present application, where bending waves often propagate relatively large distances such that dispersion in the wave packet created by the discrete contact creates problems when trying to extract information from the contact. There is nothing in Kinra to teach or suggest applying a correction to convert a measured bending wave signal to a propagation signal as if from a non-dispersive wave source in order to correct for dispersion in a bending wave packet as the wave packet propagates through the medium.

Because Kinra is not a contact sensitive device, it is difficult to see how or why one of ordinary skill in the art of contact sensitive devices would have looked to Kinra for pertinent teachings. Thus, it would not have been obvious for the skilled artisan to use the teachings of Kinra to modify that which is disclosed in Knowles. Further, even if the teachings of these

two diverse references were combined, the result still would not meet all the limitations of the claims of this application.

CONCLUSION

For the reasons stated above, withdrawal of all rejections and allowance of all claims are respectfully requested. The Examiner is invited to contact the undersigned if such communication would expedite the prosecution of the application.

Respectfully submitted,

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Date


Alan I. Cantor

Registration No. 28,163

Frederic T. Tenney

Registration No. 47,131

FOLEY & LARDNER

Customer Number: 22428



22428

PATENT TRADEMARK OFFICE

Telephone: (202) 672-5300

Facsimile: (202) 672-5399

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